Evidence versus emotion:
How do we really make financial decisions?
Methodology

The Australia Institute conducted an online survey of 1,180 adult Australians in October 2010. Respondents were sourced from a reputable online panel provider, and quotas were applied to ensure a representative sample of the broader Australian population by gender, age and household income. Respondents were provided with a small incentive ($1.50 each) so as to encourage participation but not attract ‘professional’ respondents.

The Australia Institute is a public policy think tank. Based in Canberra, it conducts research on a broad range of economic, social and environmental issues in order to inform public debate and bring greater accountability to the democratic process.
## Contents of this document

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Content</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Introduction</td>
<td>02</td>
</tr>
<tr>
<td>02</td>
<td>What is behavioural economics?</td>
<td>03</td>
</tr>
<tr>
<td>03</td>
<td>How we see ourselves affects the decisions we make</td>
<td>07</td>
</tr>
<tr>
<td>04</td>
<td>Oils ain’t oils and dollars are never just dollars</td>
<td>11</td>
</tr>
<tr>
<td>05</td>
<td>Context matters</td>
<td>17</td>
</tr>
<tr>
<td>06</td>
<td>Lots of people don’t know basic information, and don’t know how to use it</td>
<td>22</td>
</tr>
<tr>
<td>07</td>
<td>Getting into trouble</td>
<td>24</td>
</tr>
<tr>
<td>08</td>
<td>Conclusions</td>
<td>28</td>
</tr>
</tbody>
</table>
Introduction

In 2009, Australians borrowed $274 billion through home loans and spent $226 billion on their credit cards. They spent more than $60 billion on groceries and more than $21 billion on fuel and electricity. But how much time did they spend thinking about these financial decisions?

Do most Australians behave in the way that economics textbooks and our policymakers assume? That is, do most people spend hours searching for information on the costs and benefits of choosing one product over another? Do most people know how to compare costs today with benefits in a year’s time?

Or do most Australians make most of their financial decisions based on habit, advice from their friends or the first item that appears on a Google search?

The reality is that most Australians make different decisions in different ways. Some consumers are hyper-vigilant in ensuring that they do not pay credit-card interest, they compare phone plans and seek out things they need when they are on sale. In this paper, we call these people the ‘human calculators’. A much larger proportion of the community confesses to not even knowing what their mortgage interest rate is or who their electricity provider is. We refer to these consumers as ‘the oblivious’.

Some people are hyper-vigilant about petrol prices but oblivious about paying $2 when withdrawing money from an ATM. Human beings are, not surprisingly, a diverse and contradictory species.

While economists may use the language of ‘rational’ and ‘irrational’ to place consumers into two broad categories, the evidence presented in this paper suggests that such simplistic labels conceal more than they reveal. While a minority of people may fit into these extreme categories, the vast majority of the population are neither ‘human calculators’, nor completely oblivious to the consequences of their decisions.

This paper provides a comprehensive assessment of the wide variety of ways Australians make financial decisions.
What is behavioural economics?

The most commonly known version of economics is usually referred to as ‘orthodox’ economics or ‘neoclassical’ economics, with most economics textbooks and most media commentary being based almost exclusively on the conclusions of this school of thought. While the orthodox version of economics can shed much light on many decisions, one of the areas where it is least effective is in relation to consumer behaviour. As Table 2.1 makes clear, it is not difficult to see why this should be the case.

Behavioural economics provides a vastly different perspective and in turn, draws completely different conclusions about consumer behaviour. In short, while orthodox economics makes assumptions about how consumers should behave, behavioural economics seeks instead to focus on how consumers do behave. Many of the findings of behavioural economics, which is sometimes also known as experimental economics, are based on the results of either real-world or laboratory experiments, and have been influenced by the results of both surveys and thought experiments such as those presented in the following sections.

**Key findings from behavioural economics**

Whereas orthodox economics begins with the assumption that most people behave ‘rationally’, and do so all the time, behavioural economics simply seeks to identify common patterns of behaviour and then provide possible

---

**Table 2.1 Key assumptions about consumer behaviour made in orthodox economic analysis**

| 1. | Consumers have access to complete information |
| 2. | Collecting and analysing information is costless |
| 3. | People’s tastes and preferences are independent of the choices of others |
| 4. | Suppliers have no market power |
| 5. | There are no spillover costs or benefits associated with consumption decisions |
| 6. | People ignore ‘sunk’ costs and focus exclusively on ‘marginal’ or additional costs |
| 7. | People are motivated solely by self interest |

---

explanations for those patterns. A summary of the key findings of behavioural economics by the New Economics Foundation (NEF) is presented in Table 2.2.

As can be seen from these tables, the findings of behavioural economics sit in stark contrast to the assumptions made by orthodox economists and, as such, create a significant dilemma for policymakers, financial educators and others interested in understanding consumer behaviour. Put simply, if we accept the findings of behavioural economics, we cannot just assume that consumers are willing and able to make good financial decisions even when all the necessary information is freely available in some form.

While it may be true that some people are able to estimate the costs and benefits of complex financial decisions, including adjusting future flows of costs and benefits by the appropriate discount rate, it is highly unlikely that all Australians are able to do so, and even less likely that they are willing to do so.

If most people are either unwilling or unable to accurately evaluate complex financial decisions, the issue becomes what assistance, if any, should be given to people in order to help them? Many orthodox economists and government regulators, whose world view is perhaps influenced by the assumptions their economic models rely so heavily upon, argue that the onus should be on individuals to accumulate the necessary information and analytical skills to make such decisions. If they fail to do so, such a failure should simply be seen as their ‘choice’.

An alternative path is to require financial institutions, other credit providers and organisations to provide information in an easy-to-evaluate manner. For example, as a result of regulation, most advertisements for home loans must now include a ‘comparison rate’ of interest which makes it much easier for consumers to compare the likely cost of mortgages that can include establishment fees, monthly fees and annual fees in addition to the actual rate of interest. Without the compulsory provision of the comparison rate of interest, most people would have little chance of accurately determining the cheapest interest rate on offer.

While it is unlikely that orthodox economists and behavioural economists will persuade each other of how people do, or should, make decisions any time soon, it is not actually necessary for them to do so in order for policy makers and financial educators to begin the process of changing both the way that they understand consumer behaviour and, in turn, the way we design programs to assist them. That is, if we start from the understanding that different people make different decisions differently, it is then possible to determine the kinds of people, and the kinds of decisions, that would benefit most from improvement - either in the provision of information - or assistance in the actual decision making process.

### Table 2.2 Key findings about consumer behaviour from behavioural economics

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Other people’s behaviour matters: people do many things by observing others and copying; people are encouraged to continue to do things when they feel other people approve of their behaviour.</td>
</tr>
<tr>
<td>2</td>
<td>Habits are important; people do many things without consciously thinking about them. These habits are hard to change—even though people might want to change their behaviour, it is not easy for them to do so.</td>
</tr>
<tr>
<td>3</td>
<td>People are motivated to ‘do the right thing’: there are cases where money is de-motivating as it undermines people’s intrinsic motivation; for example, you would quickly stop inviting friends to dinner if they insisted on paying you.</td>
</tr>
<tr>
<td>4</td>
<td>People’s self-expectations influence how they behave: they want their actions to be in line with their values and their commitments.</td>
</tr>
<tr>
<td>5</td>
<td>People are loss-averse and hang on to what they consider ‘theirs’.</td>
</tr>
<tr>
<td>6</td>
<td>People are bad at computation when making decisions: they put undue weight on recent events and too little on far-off ones; they cannot calculate probabilities well and worry too much about unlikely events; and they are strongly influenced by how the problem/information is presented to them.</td>
</tr>
<tr>
<td>7</td>
<td>People need to feel involved and effective to make a change: just giving people the incentives and information is not necessarily enough.</td>
</tr>
</tbody>
</table>

Source: NEF. ²

² NEF, Behavioural economics.
To that end, this paper presents a wide range of categories to describe the different ways that Australians make their decisions. The categories, which are presented in Table 2.3, are meant to be illustrative rather than definitive or exhaustive. The categories are constructed in such a way that some people may fit into two or more of the descriptions provided.

These categories, and the estimated percentage of the population that fits into each category, are drawn from the results of the survey carried out for this research. The following figures provide detailed demographic information about their composition.

Figure 2.1 provides a gender breakdown of the categories described in Table 2.3. One of the main gender differences in this survey is that women report a lower degree of overconfidence than men; they are also more likely to be overwhelmed and less likely to be playing catch-up.

Table 2.3 Categories of consumer financial behaviour

<table>
<thead>
<tr>
<th>Consumer type</th>
<th>Definition</th>
<th>Percentage of the population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overconfident</td>
<td>People who say they are better than average at making good financial decisions but whose self-reported behaviour suggests otherwise (e.g., carry a credit card debt)</td>
<td>28%</td>
</tr>
<tr>
<td>Overwhelmed</td>
<td>People who admit to being below average when it comes to coping with their finances or who say that it’s too hard to figure out whether they are getting good value out of items such as their mobile phone plan.</td>
<td>18%</td>
</tr>
<tr>
<td>Playing catch-up</td>
<td>People who don’t pay their credit card off in full each month and who say they still use their credit card to pay essential bills each month.</td>
<td>30%</td>
</tr>
<tr>
<td>Oblivious</td>
<td>People who are unconcerned or unaware about things such as whether they could get a better deal on their mortgage, phone plan or pay lower banking fees.</td>
<td>41%</td>
</tr>
<tr>
<td>Eternal optimists</td>
<td>People who took out a home loan without considering the possibility of losing their job or getting sick.</td>
<td>44% (people who took out a mortgage recently)</td>
</tr>
<tr>
<td>Compartmentalisers</td>
<td>People who have a credit-card debt and simultaneously hold money in a savings or redraw facility.</td>
<td>14%</td>
</tr>
<tr>
<td>Spending hawks</td>
<td>People who have a budget and entirely stick to it.</td>
<td>6%</td>
</tr>
<tr>
<td>Human calculators</td>
<td>People described by economists as ‘rational’. They seek out relevant information, know that they are paying low prices for their utilities and mortgage and are not compartmentalisers.</td>
<td>22%</td>
</tr>
</tbody>
</table>

Note: The formal definitions and the questions used to allocate respondents into categories are provided in Appendix A.
the distribution of behaviour categories by age. Young people are clearly over-represented in the overconfident category while older people are under-represented in both the overconfident and overwhelmed categories. The starkest findings, however, are the over-representation of 35- to 54-year-olds in the oblivious category, and of older people among the human calculators.

**Figure 2.2 Financial behaviour types by age**

The most interesting pattern in Figure 2.3 is the apparent lack of any strong connection between household income and behaviour category. While low-income earners are clearly over-represented in the overwhelmed category and high-income earners are much more likely to be defined as human calculators than other income groups, overall the results suggest that attitude is more important than income when it comes to the allocation of people among behavioural classifications.

One final demographic breakdown of the composition of the behavioural classifications is provided in Figure 2.4, which shows the impact of education. As with Figure 2.3, perhaps the most interesting feature of Figure 2.4 is the apparent lack of a strong pattern apart from the significant under-representation of those who did not complete school among the human calculators and among those playing catch-up. Although there are some differences in this regard, education would not appear to be the major determinant of either good or poor financial behavior – instead, as this report make clear, individual and personal differences beyond socio-economic situation are much more important.
How we see ourselves affects the decisions we make

The way we see ourselves affects the way we make decisions. People who believe they have a ‘good sense of direction’ are less likely to ask for directions even when they are lost. Advertising has been found to be most effective on those who believe advertising doesn’t work on them. If people feel confident, they are more likely to make decisions themselves but if they feel uncertain, they are more likely to procrastinate or seek the advice of others.

This section provides data on how Australians perceive themselves in relation to their ability to manage their finances and make long-term financial decisions.

Figure 3.1 provides a snapshot of how respondents view their ability in relation to various financial activities. It shows that for all areas except ‘Investing for retirement’, far more Australians believe that they are above average than below average. Given that most human attributes such as intelligence or height are said to be ‘normally distributed’, it would be expected that just as many survey respondents would report possessing a below-average level of understanding as those who report being above average. The data presented below clearly shows however that Australians have an exaggerated self perception of their financial knowledge and decision-making skills.

Figure 3.1 Would you describe yourself as better or worse than average at the following things?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Better than average</th>
<th>Worse than average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding everyday financial products</td>
<td>54%</td>
<td>46%</td>
</tr>
<tr>
<td>Monitoring my personal/household budget</td>
<td>57%</td>
<td>43%</td>
</tr>
<tr>
<td>Resisting impulse purchases</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Making good financial decisions</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Saving for large purchases</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Sticking to my personal/household budget</td>
<td>48%</td>
<td>52%</td>
</tr>
<tr>
<td>Investing for retirement</td>
<td>33%</td>
<td>67%</td>
</tr>
</tbody>
</table>

Base = 1,180.

Figure 3.2 Would you describe yourself as better or worse than average at understanding everyday financial products (eg credit cards, bank accounts)?

<table>
<thead>
<tr>
<th>Income Category</th>
<th>Better than average</th>
<th>About average</th>
<th>Worse than average</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>66%</td>
<td>26%</td>
<td>8%</td>
</tr>
<tr>
<td>High-income</td>
<td>74%</td>
<td>25%</td>
<td>1%</td>
</tr>
<tr>
<td>Middle-income</td>
<td>68%</td>
<td>28%</td>
<td>4%</td>
</tr>
<tr>
<td>Low-income</td>
<td>57%</td>
<td>34%</td>
<td>9%</td>
</tr>
<tr>
<td>55+</td>
<td>50%</td>
<td>40%</td>
<td>10%</td>
</tr>
<tr>
<td>35-54</td>
<td>57%</td>
<td>37%</td>
<td>6%</td>
</tr>
<tr>
<td>18-35</td>
<td>65%</td>
<td>29%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Base = 1,180.

Figure 3.2 provides data on Australians’ self-assessment of their relative ability to understand financial products. Survey respondents were asked to rank their ability to understand everyday financial products from ‘worse than average’ to ‘better than average’. While women are more modest in their self-assessment than men, both sexes are far more likely to perceive themselves as possessing an above-average understanding of financial products than a lower-than-average understanding. The most common response for both men and women is to describe themselves as ‘better than average’. Indeed, only 10 per cent of women and a remarkable six per cent of men perceive themselves to be below average in this regard.

When a population is ‘normally distributed’ the number of people who are above average is approximately equal to the number of people who are below average.

Chapter 03 | How we see ourselves affects the decisions we make
This pattern of self-belief also holds across people with diverse income levels. While low-income earners are more likely to believe that they have below-average understanding of financial products than middle- and high-income earners, the apparent over-confidence remains with 49 per cent of respondents from low-income households believing that they have above-average understanding of financial products compared to 12 per cent who believe they have below-average understanding.

Figure 3.3 shows respondents’ self-assessment of their ability to make good financial decisions. Survey participants were asked to rank their ability to make good financial decisions from ‘worse than average’ to ‘better than average’, with results very similar to those from the previous question. Again, most respondents ranked themselves as better than average. This occurred in all categories except for low-income households where most respondents described themselves as about average (44 per cent), followed closely by better than average (41 per cent). Only 15 per cent described themselves as worse than average.

Figure 3.3 Would you describe yourself as better or worse than average at making good financial decisions?

![Figure 3.3: Self-assessment of ability to make good financial decisions](image)

Figure 3.4 breaks down responses about the ability to make good financial decisions according to the way that participants use their credit cards. It shows that people who pay their credit cards off on time are much more likely to believe that they make good financial decisions than the population as a whole. Indeed, of those who always pay off their credit cards on time, only four per cent believe they are below average in relation to their financial decision-making compared to 18 per cent for those who do not.

Figure 3.4 Would you describe yourself as better or worse than average at making good financial decisions?

![Figure 3.4: Breakdown of responses about ability to make good financial decisions](image)

Figure 3.4 also shows that a high degree of confidence about financial decision-making can be found even among those who, by their own account, have experienced financial difficulties in the previous 12 months. While this result may be explained by the fact that financial hardship can be caused by external factors such as losing a job or becoming ill, it does suggest that Australians from all walks of life and in virtually all situations are more likely to believe that they are above average in relation to financial matters than below average.
Figure 3.7 presents those respondents classified as overconfident. To be categorised as overconfident, respondents must have indicated that they are better than average at making financial decisions and agreed that they have failed to do one or more of the following:

- paid their credit card off in full each month
- made themselves aware of what fees and rates apply to their savings account
- discovered what fees and rates apply to their home loan.

We can see that men (31 per cent) are more overconfident than women (26 per cent). Over-confidence falls with age; a third of all 18-to-35-year-olds are overconfident but this

Figure 3.5 highlights the link between people's perceived ability to understand everyday financial products and the way that they use their credit cards. The results for this were very similar to the results about making good financial decisions. It shows again the high levels of respondents' self-reported understanding of everyday financial products, regardless of whether they had been in financial difficulty in the previous 12 months and regardless of the way they used their credit card.

Interestingly, the area where people expressed the least confidence was in relation to retirement savings. This relates to the fact they are more likely to focus on things that deliver short-term rather than long-run benefits, even though the latter may be more significant. While only nine per cent of respondents believe that they are below average in their ability to understand financial products, figure 3.6 shows 33 per cent believe they are below average when it comes to saving for their retirement. Similarly, while more than 57 per cent of people believe they are above average when it comes to monitoring their budget, only 30 per cent of people believe they are above average when it comes to saving for their retirement.

The demographic breakdown of respondents' perceptions of their ability to plan for their retirement is illuminating. There is a clear pattern of younger people having less confidence in their retirement preparations than older respondents. As is the case with all of the issues, men are more confident in their ability than women.

**Figure 3.5 Would you describe yourself as better or worse than average at understanding everyday financial products (eg credit cards, bank accounts)?**

**Figure 3.6 Would you describe yourself as better or worse than average at saving for retirement?**

**Figure 3.7 Proportion of people who are ‘overconfident’**

Base = 1,180.
drops to 22 per cent among 55+-year-olds. However, over-confidence rises with income; 31 per cent of high-income earners reveal that they are overconfident with this figure declining as income decreases. Despite this, still one-in-four low-income respondents are classified as overconfident.

Figure 3.8 Proportion of people who are ‘overwhelmed’

More women (20 per cent) are classified as overwhelmed than men (15 per cent). Interestingly, being classified as overwhelmed also decreases with age in the same way as those classified as overconfident. Those who are 18 to 35 years old are the most likely to be overwhelmed (21 per cent) and overconfident (34 per cent). People 55 years and over are the least likely to be overwhelmed (12 per cent) or overconfident (22 per cent). The data also reveal that the lower a person’s income, the more likely that person is to be overwhelmed.

Conclusions

The data presented above indicate that even when participating in an anonymous survey, Australians are unlikely to describe themselves as being below average in relation to financial matters. The data on self-perception reveals a high degree of apparently excessive self-confidence, which is likely to have a significant impact on the way people seek out and heed independent financial advice. Furthermore, it is likely that people will be even less likely to admit to lacking confidence or ability in relation to financial decisions when discussing their circumstances with an adviser or educator, perhaps a condition requiring consideration by those seeking to provide such advice.

Key lessons

1) Most people think that they are ‘above average’ when it comes to financial decision-making but, if ability is normally distributed (that is, the number of people who are above average is equal to the number of people who are below average), this cannot be the case. However, if people find it difficult to admit they find situations confusing, they are less likely to ask for help.

2) While only nine per cent of respondents believe that they are below average in their ability to understand financial products, more than 33 per cent believe they are below average when it comes to saving for their retirement.

3) Men are more likely to think they are above average than women and men are more likely than women to be categorised as overconfident.

4) Low-income earners and people who have experienced financial hardship all report lower levels of confidence in their financial literacy than the population as a whole but members of all of these groups remain more likely to believe they are above average than below average.

5) People aged 35 to 54 are more likely than younger and older age groups to believe that they are below average in relation to financial understanding and the ability to budget. It is not clear whether this reflects greater self-awareness or lower levels of ability but the effect persists even when controlling for the presence of children in the house.

6) The only area of financial decision-making where the number of respondents who thought they were above average was similar to the number of people who thought they were below average, was investing for retirement.
Economic theory suggests that walking 10 minutes to save $10 on a new $30 phone battery makes just as much sense as walking 10 minutes to save $10 on the $40,000 price of a new car. The ‘cost’ is a 10-minute walk and the ‘benefit’ is $10. In the language of economics we would say that dollars are perfect substitutes since a dollar buys exactly the same amount of stuff regardless of which dollar is used. Despite this, few people act in a way consistent with this theory. In reality, people appear to be more willing to pursue financial savings from some sources than from others.

Figure 4.1 provides data on the disparity in the willingness of people to search for small savings in some of their regular expenses. While orthodox economic theory suggests that people should be as motivated to save $5 a week on their grocery bill as they are on their superannuation fees, this experimental result suggests otherwise.

The figure shows that while 28 per cent of respondents say they would definitely switch banks to save $5 a week on fees, only four per cent say they would definitely switch to a cheaper supermarket. While this difference could be explained in terms of the fact that the latter change requires additional travel time, such an explanation sheds no light on why 14 per cent of people say they would definitely take action to save $5 a week on petrol.

Why would three times as many people be motivated to save $5 a week on petrol than they do on groceries? It could be that as less is spent on petrol than on groceries, the savings in percentage terms seem higher and therefore a worthier pursuit. Such an emphasis on percentage savings rather than absolute savings, while common, is completely at odds with the assumptions about consumer behaviour made by orthodox economists. In simple terms, a human calculator wouldn’t think that way.

Another possible explanation is that because we drive past petrol-price displays many times each day and are exposed to regular public debates about the price, we are more tuned in to the price of petrol than to the price of the other things we buy.

* Experimental question: Suppose you discovered that you could save $5 a week in bank fees if you switched to another bank/ groceries if you used a supermarket that was further away/ petrol if you used a petrol station that was further away/ fees and charges if you switched superannuation funds/ fees and charges if you changed your mobile phone provider/ if you changed your electricity supplier. Taking into account the effort involved, do you think you would do it? Total respondents responding to this experiment: n=1,150.

Interestingly, both supermarkets and petrol stations appear to understand, and act on, the apparent disparity in our degree of concern with cheap petrol compared to cheap groceries. For example, supermarkets offer fuel-discount vouchers to consumers who buy their groceries while petrol stations offer fuel discounts to people who purchase groceries or snacks in store. When the four-cents-a-litre discounts available for petrol are placed into context, the ‘savings’ associated with the pursuit of discounted petrol can easily evaporate. For example, customers who put 40 litres of fuel in their cars may ‘save’ $1.60 on petrol but the profit margin on the bottled water and oversized chocolate bars they then buy typically ensures that the proprietor is no worse off. Similarly, if supermarkets can persuade customers to focus on the cheap petrol they receive rather than on the expensive groceries they purchase, the ‘cost’ of providing such discounts will be negligible.

It is interesting to note that while people report a high degree of willingness to shop around in pursuit of potential savings, the data on consumers’ willingness to switch providers tell quite a different story. For example,
around three per cent of people switch banks each year, 4 between three and six per cent of those with superannuation funds switch, 5 and around 12 per cent of people with mobile phones switch. 6

Balancing our mental accounts

Behavioural economists use the concept of ‘mental accounting’ to describe the way that some people try to make sense of their finances. For example, a household budget may rely on one salary to meet mortgage expenses while another person’s income may be allocated to meeting living expenses. Although such an approach may be simple and effective, it is not ‘rational’ according to orthodox economics; for example, it suggests that the relative expenditure on mortgage payments and other expenses would be determined by the relative growth in the income of the two people rather than by their consumption preferences.

Another form of mental accounting is the practice of holding multiple bank and credit-card accounts which, in a person’s head at least, are notionally linked to certain plans or obligations. The survey results show that many people seem comfortable with the idea of holding money in ‘special’ savings accounts or like to be in ‘advance’ on their mortgage even though they have not paid off their credit cards in full. Such people are effectively ‘renting’ the idea of a positive balance in their savings account but paying credit-card interest rates to achieve it.

Figure 4.1: Proportion of respondents with a credit card who paid off their most recent credit-card bill in full

Figure 4.2 provides a demographic breakdown of ‘compartmentalisers’, people whom we define as those with sufficient funds in a savings account or sufficiently in advance on their mortgage that they could repay their outstanding credit-card debts or personal loan if they chose to do so. It shows that 14 per cent of Australians can be described as compartmentalisers, with a slightly larger number of men, 35- to 54-year-olds and middle-income survey respondents appearing to fit into this category.

Figure 4.2: Proportion of people who are ‘compartmentalisers’

Base = 927. Includes respondents who reported having at least one credit card.

Base = 1,180.

---

Playing catch-up
People who do not pay off their credit card bills in full each month usually pay high rates of interest on their purchases, sometimes in excess of 20 per cent per annum. Around half of respondents (49 per cent) said they had paid off their most recent credit card in full (meaning they probably did not pay interest on those purchases), while 31 per cent said they had not paid it off in full (and therefore were paying high interest rates). A further 20 per cent did not have a credit card.

Survey respondents with a credit card were asked how often they paid a range of essential bills using their cards. As Figure 4.3 shows, among the one in three people who do not pay off their credit card in full, 20 per cent or more always, or often, pay many essential bills on credit. This includes 31 per cent who pay their home phone or internet bill on their credit card, 28 per cent who pay their car insurance this way, and 26 per cent who pay for food and groceries on credit. In addition, 22 per cent of those who did not pay off their credit card in full said they always or often pay for doctor’s appointments on credit. Of all the essential bills listed, only rent and mortgage payments (six per cent each) were rarely paid by credit card.

Figure 4.4 shows the proportion of all respondents with a credit card who said they always or often paid each kind of essential bill on credit and also did not pay off their most recent credit card bill in full. It shows that one in 10 people with a credit card (10 per cent) are effectively paying high rates of interest on their food and grocery purchases, while eight per cent pay interest on their doctors’ bills.

Figure 4.3 Respondents who always or often pay essential bills using their credit card as a proportion of those who did not pay off their most recent credit card bill in full.

Figure 4.4 Proportion of respondents with a credit card who always or often pay for essential bills on credit and don’t pay off their credit card in full.
Overall, 30 per cent of survey respondents said that they always or often pay one or more essential bills using their credit card and then do not pay off their card in full. These people could be said to be ‘playing catch-up’, because they do not have sufficient cash flow to pay all their bills and are being charged high rates of interest in order to cover them.

Figure 4.5 Proportion of respondents who are ‘playing catch-up’

![Bar chart showing proportion of respondents who are 'playing catch-up' by gender and income level.]

As Figure 4.5 shows, men are more likely than women to be playing catch-up in this way. People in low-income households are less likely to play catch-up, presumably because they are also less likely to have a credit card in the first place.

One explanation for the relatively low number of low-income earners in the ‘playing catch-up’ category is the relatively high proportion of low-income earners with no credit cards. More than a third of people in low-income households (38%) said they had no credit card, compared with just 10% of people in high-income households.

While those playing catch-up may sometimes have no choice but to pay bills on their credit cards, the data in Figure 4.7 sheds light on how people would respond if faced with the choice between a final notice for one of their bills, or going without other essentials if they had exhausted all the credit on their credit cards. Perhaps unsurprisingly the bill people are most likely go without other essentials for in order to pay immediately was their rent or mortgage (11 per cent). At the other end of the spectrum, 39 per cent of respondents said that they would wait until their next pay day in order to pay their mobile phone bill.

The most surprising finding, however, is that one third of people said that they would postpone going to the doctor rather than go without some other essentials. In other words, people are more likely to prioritise paying their rent or mortgage (89 per cent), credit cards (80 per cent), car registration (78 per cent) and electricity bills (69 per cent) than they are to see the doctor (67%).

Table 4.1 Credit card behaviour by household income

<table>
<thead>
<tr>
<th></th>
<th>Low-income</th>
<th>Middle-income</th>
<th>High-income</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paid credit card off in full</td>
<td>31%</td>
<td>48%</td>
<td>62%</td>
<td>48%</td>
</tr>
<tr>
<td>Did not pay off credit card in full</td>
<td>29%</td>
<td>35%</td>
<td>27%</td>
<td>30%</td>
</tr>
<tr>
<td>Credit card behaviour unknown</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Does not have a credit card</td>
<td>38%</td>
<td>16%</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Base = 1180. Columns may not sum to 100 per cent due to rounding error.
Chapter 04

Oils ain’t oils and dollars are never just dollars

Not all investments were created equal

Just as consumers see the pursuit of savings on different products differently, it seems they view the potential returns on different kinds of investments through different lenses. Figure 4.8 presents the responses to three different framings of the same question—what people do if one of their investments falls in value.

One group of respondents was presented with the scenario that some shares they had purchased for $5 before the Global Financial Crisis (GFC) had fallen to $4 (a 20-per-cent reduction in value). Another group was presented with the scenario that their $250,000-investment property had fallen by 20 per cent in value and a third group was told that their $250,000-superannuation portfolio had fallen by 20 per cent in value.

All three groups were asked whether they would:

- buy more of the investment
- compare the relative growth prospects of their investment to other alternatives
- hold on to the investment until it regained its original value
- sell the investment to ensure no further money was lost.

The results presented in Figure 4.8 are difficult to interpret but it is quite clear that investors do not view all investment decisions equally. For example, respondents were four times more likely to view a reduction in the price of shares as an opportunity to invest than they were to see a reduction in the value of superannuation as an opportunity to do so. Indeed, while shares comprised the investment category that contained the highest proportion of ‘bargain hunters’, superannuation investors were the most likely to say that they would sell. Given that the majority of superannuation funds are invested in shares, this result presents compelling evidence that the way decisions are framed has a huge effect on people’s actions.

Participants asked about a decline in the value of a hypothetical share or property investment most commonly replied that they would hold, while those asked about a decline in the value of their superannuation most commonly replied that they would compare their fund’s performance with other funds. This might be interpreted as suggesting that investors have received the message about the importance of shopping around in order to get the best value out of their superannuation; however, it would also suggest that investors have not heard the message that the past should not be used as an indicator of likely future returns.
A loss in the value of a superannuation portfolio can prompt investors to search harder for reduced administrative costs but this practice would seem to be ‘irrational’. The benefit of searching for lower fees actually declines when the value of superannuation declines (fees are typically charged as a percentage of asset values), while the time taken to undertake such a search remains constant.

While the data presented above does not take account of factors such as the variation in transaction costs associated with selling shares or a house, the anomalies that emerge are sufficiently stark to support the conclusion that people look at different investment decisions differently, even whether the ‘numbers’ are the same.

**Conclusions**

People clearly do not see all dollars as equal. For reasons best known to themselves they are willing to search hard and travel far to achieve savings on some things while they are oblivious to, or unconcerned about, the missed opportunities to save similar amounts of money on other purchases.

In addition to highlighting the apparent disparity in the willingness to pursue some forms of saving over others, the data presented above shows that people often say one thing but actually do another. Although people may report being willing to switch product providers, in reality most people do not change their bank accounts, phone supplier or electricity company very often.

### Key lessons

1. People often believe they shop around more than they actually do.
2. People need to be encouraged to shop around for all of their goods and services, not just for highly visible spending such as petrol.
3. People use their own ‘mental accounts’ in order to create a sense of control over their finances but the result can be that they end up ‘renting’ the idea that they have savings.
4. Consolidating saving and credit accounts could save significant amounts of interest instantly.
5. Men are more likely to be compartmentalisers than women.
6. People respond to similar situations in different ways depending on the context. Financial educators therefore have an important role in helping people to decide which frame of reference is most appropriate for the decision being made and that the frames of reference used are consistent.
7. In relation to people’s savings, educators should stress the need to focus on net financial position because some people may be inclined to focus on their positive saving balance and ignore debts that offset their savings.
8. Overall, educators need to ensure that mental accounts are not being used to narrow people’s perspectives.
Context matters

When it comes to assessing ‘value’, the context in which decisions are made matters. For example, spending $4 on an ice-cream at the movies makes much more sense than spending $4 on an ice-cream at a petrol station when undertaking a long trip. Indeed, as the owners of movie theatres know all too well, it is easy to spend more on snacks than it is on the movie ticket; although most people plan ahead if they are going to the movies, few arrange to take their own Maltesers with them. Many of those same people would probably refuse to pay for such expensive snacks if they were on a long road trip where an ice-cream or chocolate are not only expensive but would, in all likelihood, melt before they could be eaten.

While the context in which decisions are made (often referred to as the way decisions are ‘framed’) makes no difference to the outcome of an objective ‘cost-benefit analysis’, in practice such framing has a significant impact on the way people see decisions. The standard assumption of economics textbooks and policymakers is that people act like ‘human calculators’ and are thus immune to the way that choices are framed or contextualised. However, as the following results make clear, in reality many Australians are influenced by the way choices are presented.

Other people’s recommendations matter

When deciding how much to spend on a new house, most people would likely consider the features of the homes on offer, the location of the house, their income and, hopefully, their future income, the interest rate and, hopefully, future interest rates, and their probable expenditure on other goods and services. But would a financial institution’s assessment of how much an individual can borrow have much of an impact on how much that individual would be willing to spend?

Figure 5.1 suggests the context provided by financial institutions as it relates to the maximum amount an individual can borrow has the potential to significantly influence, or ‘anchor’, the borrowing behaviour of customers. For example, when asked to choose between buying a smaller $400,000 house or a larger $500,000 house, 61 per cent of a subset of survey respondents stated that they would opt for the smaller house in a situation where the bank said that the most they could borrow was $500,000. This suggests that many Australians are reluctant to borrow the ‘maximum’ that a financial institution will lend them.

In order to test whether or not the context provided by banks matters, a separate subset of respondents was asked the same question, the only difference being that they were told the bank was willing to lend them up to $750,000. Under these circumstances, the percentage of people opting for the smaller, cheaper house fell to 43 per cent. Similarly, when a third subset of respondents was told that the bank was willing to lend them up to $1 million, the percentage of people opting for the smaller, cheaper house fell again to 40 per cent.

The data presented in Figure 5.1 suggests that the ‘maximum borrowing levels’ – even if they are not actually recommendations regarding how much someone should borrow – can have an impact on the willingness of people to borrow larger amounts of money and, in turn, the potential for people to overstretch themselves financially. As reported below, two in three respondents who took out a home loan in the past five years (69%) reported taking into account the maximum amount the bank said they could borrow.

The data presented in Figure 5.1 suggests that the ‘maximum borrowing levels’ – even if they are not actually recommendations regarding how much someone should borrow – can have an impact on the willingness of people to borrow larger amounts of money and, in turn, the potential for people to overstretch themselves financially. As reported below, two in three respondents who took out a home loan in the past five years (69%) reported taking into account the maximum amount the bank said they could borrow.

If the maximum borrowing levels provided by banks are perceived by some borrowers as in some way ‘legitimising’ higher borrowing – as the experimental results above demonstrate – then changes to the way that this information is calculated and communicated could potentially have a substantial impact on actual borrowing behaviour.
The past affects decisions today

Of course, it is not only financial institutions that provide Australians with the context within which they view financial decision-making. If friends and family seem comfortable borrowing large amounts of money and/or spending a very high proportion of their income on mortgage repayments, it becomes easier for people to do likewise. Although people may be taught at an early age that doing something just because everyone else is doing it doesn't necessarily mean it's a good idea, the sub-prime crisis in the United States provides clear evidence that such a lesson is not always heeded by educated adults.

History is an important source of context. While economic theory suggests that decisions made yesterday should not affect decisions made today—which is, 'sunk costs' should be ignored—in practice many people will continue with a 'bad' decision even when it can be shown that they would be better off with an alternative one. For example, a gambler on a losing streak may be convinced that if they keep gambling their 'luck will turn'; or a home renovator or backyard mechanic, who find themselves out of their depth, may continue to spend time and money trying to dig themselves out of a hole.

While we are often told that we shouldn't throw 'good money after bad', we are also told not to 'change horses mid stream' and that we should 'keep our nose to the grindstone' and 'stick to our guns'. One economist's 'sunk cost' is another person's test of commitment.

That said, while language and culture may be ambiguous about whether to stick with a bad idea, finance theory and history are quite clear—make decisions with the head not the heart; put ego aside, cut losses, and make decisions about which investments to hold based on the assets that are likely to grow the fastest. While it may be tempting to hold on to an investment that has suffered a loss in value until it regains the price that was paid for it, the quickest way to regain money as opposed to pride is to sell underperforming assets and purchase ones that are likely to grow rapidly in value.

As Table 5.1 shows, however, not all investors seem to understand these principles. While 21 per cent of respondents said that they would sell shares that had just dropped in value after being told it is common to do so, only 15 per cent said they would sell after being told that it was not wise to do so. These results indicate that suggesting an ‘appropriate’ frame of reference for a financial decision is likely to have a significant effect on the way that people see the decision and on the decisions they ultimately make.

The present affects the future

Just as the past can affect what we do today, what we are doing today can affect how we see the future. When people take out a home loan, they usually consider their current level of expenditure and the prospect of interest rate rises. However, as Figure 5.2 shows, there are a range of important changes which many people do not consider when making such a critical decision.

The fact that a family has two incomes and no children today does not mean that their circumstances will remain that way for coming decades. Yet only 54 per cent of respondents who took out a home loan recently said that they did not consider the possibility that they might lose their job or become sick. We have defined these people as ‘eternal optimists’. Similarly, only one in three (36 per cent) considered the possibility of taking time off work to look after children or loved ones – an option that a great many people do in fact take up at some point in their lives.

Table 5.1 Experiment: The influence of framing on decisions to sell or hold shares*

<table>
<thead>
<tr>
<th>Framing 1 (encouraging to sell)</th>
<th>Framing 2 (encouraging to hold)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keep your shares</td>
<td>79%</td>
</tr>
<tr>
<td>Sell some or all of your shares</td>
<td>21%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Experimental question 1: When share prices fall, it is common practice for people to sell their shares to avoid losing more money. If you owned some shares and prices began to fall, would you...? Experimental question 2: Share prices go up and down a lot, but good investors hold onto their shares even if prices are falling. If you owned some shares and prices began to fall, would you...? Total respondents responding to this experiment: n=607.
A circumstance that is almost certain to change over the life of a 25- or 30-year mortgage is the interest rate and this certainty is reflected in the fact that around 90 per cent of people took potential interest rate rises into account when they were considering how much they should borrow. However, as shown in Figure 5.4, nearly 10 per cent of people with mortgages say they did not take changes in interest rates into account, with the proportion failing to do so being highest among low-income earners (17 per cent) and those who have experienced financial difficulty in the past 12 months (13 per cent).

Figure 5.4 When you were deciding how much money to borrow with your current home loan did you take into account the possibility of interest rate rises?

Base = 236. Includes respondents who reported taking out a home loan in the previous five years.

The hat we wear affects the decisions we make
A final way in which context can matter concerns the ‘frame of reference’ we choose to adopt when making a decision. Do we put on our ‘friend’ hat or do we put on our ‘business-decision’ hat when we are deciding what is fair?

In order to test how strong this ‘hat selection’ effect is, survey respondents were split into two separate groups. One group was asked how much they would expect to be repaid if they were to lend a friend $1,000 (a ‘friendship decision’). The other group was asked the same question but with the added context that they should assume that the inflation rate was five per cent and the interest rate paid by the banks was 10 per cent (a ‘business decision’). The results are shown in Figure 5.5.

Figure 5.5 When you were deciding how much money to borrow with your current home loan did you take into account the possibility of interest rate rises?

Base = 236. Includes respondents who reported taking out a home loan in the previous five years.
The first interesting finding in Figure 5.5 is that respondents who were in the ‘business frame’ were more pessimistic about their friends repaying the $1,000 in full. It would seem that in asking respondents to think in a business frame resulted in more of them assuming that their friends would be similarly commercial in their motivations.

The second interesting finding is that when no context concerning inflation and interest rates was provided, the overwhelming majority of respondents believed that their friends should simply repay the $1,000, with less than 10 per cent suggesting that their friends should pay more than that amount. However, when respondents were provided with the inflation and interest rate context, the proportion of respondents who believed that their friends should repay more than $1,000 rose to more than 30 per cent, a more than threefold increase.

Is it really on sale and do I really need it?
Finding something on sale is the emotional equivalent of a small Lotto win for many shoppers. Perhaps unsurprisingly, shops are aware of this and often price their goods accordingly. High prices are often interpreted as a signal that a product is of high quality and conveys status. Low prices encourage increased turnover. The ability to frame buyers’ perceptions by offering ‘expensive’ goods at sale prices is, for some retailers, a lucrative strategy.

As Figure 5.6 shows, people who pay off their credit cards on time are more likely to say that they would only buy something that was on sale if they really needed it (66 per cent) than those who do not systematically pay off their credit cards in full (56 per cent).

The survey data also suggests that people who had experienced financial difficulties in the past 12 months were much less likely (54 per cent) to say that they would only buy something on sale if they really needed it than those who had not recently experienced financial difficulties (64 per cent). Similarly, those who had recently experienced financial hardship were much more likely to say that they would ‘buy as much as they can’ when things are cheap (13 per cent) compared to the rest of the population (eight per cent).

As discussed in Section 4, the term ‘mental accounting’ in behavioural economics is often used to describe the way in which people keep track of their finances by creating artificial ‘accounts’ in their heads. This approach may help them to keep track of their finances but sometimes mental accounting can lead them to spend more money on interest than is necessary. The way that some people view ‘sales’ provides a more extreme example of what can happen when mental accounting goes wrong. That is, for some people at least, purchasing something on sale can be used to frame consumption purchases as a ‘saving’ rather than as expenditure. If we adopt this version of mental accounting, the more we spend, the more we save.

Reframing the way that consumers view the value of other products in a shop is a further reason for retailers to hold sales. Figure 5.7, for example, shows that around one third of consumers believe that if a product is on sale in a shop, its other products are likely to be cheap as well.
The most striking result, however, is that people who pay off their credit cards on time are far more likely to believe that if a shop is selling something on sale, its other products will be more expensive (37.5 per cent).

**Figure 5.7 If a product in a store is advertised at a low price, which of these do you think is most likely?**

![Bar chart showing the percentage of people who believe different scenarios are most likely to be true, depending on whether they pay off their credit card on time or not.]

Conclusions

In theory, the only tools that people require to make good financial decisions are, all of the relevant information and a calculator. In practice however, not only do people need to have good analytical skills (see Section 2), they also need to look at information in the right frame of reference. The data presented in this section demonstrate that decisions such as how much a person can afford to borrow, whether to sell shares after a fall in value and expectations about how much friends who borrow money should repay, can all be influenced by the context in which the decision is made.

These findings suggest that in order to encourage more Australians to make better financial decisions, it may be necessary to provide people not just with good information but also with the right kind of contextual information. For example, when assessing how much money could be saved by searching for lower mortgage interest rates or superannuation fees, rather than focusing on potential percentage savings it might be more useful to focus on the absolute amount of money that might be saved compared to other household expenditures.

**Key lessons**

1) All information presented to consumers may be interpreted by them as a recommendation or suggestion, even when explicit statements to the contrary are provided. When numbers (such as maximum borrowing amounts or minimum credit card repayment levels) are provided, these numbers can become ‘anchors’ on which some people base their decisions.

2) People are loss-averse and, as such, are reluctant to sell investments that are objectively underperforming.

3) People are likely to project from the present into the future resulting in a propensity to under-invest in insurance and a failure to make plans for likely contingencies.

4) Retailers understand how to contextualise information in ways that maximise sales revenue. As a result, people who experience financial hardship are more likely than average to make bulk purchases of items that are on sale and to assume that if one item in a shop is on sale, other items in the shop are also likely to be relatively inexpensive.

5) Financial educators have an important role to play in helping to frame and contextualise financial decisions.
Lots of people don’t know basic information, and don’t know how to use it

A key principle of orthodox economics is that, for markets to function effectively, everyone needs to have access to the same information. According to the theory, if everyone knows and acts on the right information, then they will make good decisions which match their preferences and priorities. If people do not have the right information, there is said to be an ‘information asymmetry’ which can result in negative outcomes for consumers. The need to minimise any information asymmetry is the reason why so much attention has been given in recent years to providing consumers with as much information as possible. By this account, an informed consumer is an empowered one.

Despite the fact that financial institutions disclose a great deal of information about their products and services as a matter of course, many people don’t actually pay attention or absorb the facts which are relevant to them. In fact, our survey results indicated that 41 per cent of people are ‘oblivious’, because they do not know at least one of the following:

- the fees or interest rate that applies to their main savings/transaction account
- the fees or interest rate that applies to their home loan (if they have one)
- whether they could get a better deal on their home loan (if they have one)
- whether their mobile phone plan provides good value.

Figure 6.1 provides a snapshot of people who are oblivious. It shows that being unaware of such basic financial information is equally common among men and women and across different income categories. However, people in their ‘middle’ years (35-54) are more likely to be ‘oblivious’, perhaps because they have a larger number of financial products, including home loans.

The time value of money
Economists assume that people not only estimate the costs and benefits associated with different choices, but that they then ‘discount’ future benefits by the appropriate discount rate. According to economic theory, a ‘rational’ person would know that they could earn interest on money over time, so they would require more money in the future in order to persuade them to forgo money today. For example, $100 today at an interest rate of 10 per cent per annum would suggest that a person would need to be offered at least $110 to induce them to wait to receive their money for a year. Economists call the rate of interest used to compare future flows of money with money today the ‘discount rate’.

In order to test whether people's discount rates are consistent or whether they are affected by the way that questions are posed, an experiment was undertaken. The survey respondents were divided up into four groups and each was asked, in slightly different ways, whether they were willing to wait one month to receive 10 per cent more money or would prefer to receive the money sooner.
Figure 6.2 shows one quarter of the respondents were asked if they would prefer $10,000 now or $11,000 in one month’s time: 77 per cent preferred $11,000 in one month while 23 per cent preferred the $10,000 now.

Another quarter of respondents were asked if they would prefer $100 now or $110 in one month’s time: 54 per cent said that they would prefer $110 in one month while 46 per cent said that they would prefer $100 now.

Economic theory would suggest that since the discount rate (10 per cent a month) between the two experiments is identical, the percentage of people accepting or rejecting the discount rate should also be identical. This was not the case. The only possible explanation is that in absolute terms the amount of money on offer for waiting a month was larger in the first example ($1,000) and smaller ($10) in the second example.

Another similar experiment was conducted with the same effective discount rate of 10 per cent per month but respondents were asked whether they would like $100 or $10,000 in one month’s time or $110 or $11,000 in two month’s time.

The results saw a decrease in the number of respondents who were willing to wait an extra month to receive 10 per cent more money. Forty-two per cent of respondents wanted the larger amount of money while 70 per cent wanted the smaller amount in one month rather than in two months. This indicates that further into the future, the discount rate required has become larger. This again is not consistent with orthodox economic theory, which would suggest that the discount rate should remain constant over time and should not be influenced by the amounts of money being offered.

**Conclusions**

Addressing poor financial understanding and encouraging better financial decision-making is not simply a matter of providing more information to consumers. Despite the wealth of information about financial products that is available and readily accessible, a huge proportion of people do not know basic information about their savings accounts or home loans. In order to promote better financial knowledge, information of the right kind needs to be presented in the right way.

Understanding the ‘time value of money’ is central to making good financial decisions. There is little doubt that financial institutions and all providers of credit understand this concept, but the results reported above suggest that the public has thought about the issue, or cares about the issue, far less than those who offer them credit. Calculating the ‘net present value’ of a future flows of funds is more difficult than adding up the total household expenses for a week, but unless people have a good understanding of the time value of money they will be unable to make accurate comparisons of some financial products or make good long-run investment decisions.

Orthodox economics assumes that rational people make rational decisions but unless people possess the analytical skills to calculate and interpret the impact of different discount rates on their decisions, they will be unable to make good financial choices without independent advice.

**Key lessons**

1. It is unwise to assume that most people can recall basic information about the financial products they use.
2. Providing additional information can result in more confusion and misunderstanding unless the information is presented in the right way.
3. People do not appear to have a good understanding of the time value of money. In addition, context plays a major role in influencing people’s inter-temporal decision-making.
4. People seem to focus on the size of the potential payout rather than the percentage return associated with waiting for future financial gains.

*Experimental question: Suppose that someone was going to give you some money. Which of the following would you prefer to receive? Total respondents responding to this experiment: n=680.*

**Figure 6.2 Experiment: Time-variant preferences about future financial gains**

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>$100 today</td>
<td>54%</td>
</tr>
<tr>
<td>$110 a month from now</td>
<td>46%</td>
</tr>
<tr>
<td>$10,000 today</td>
<td>77%</td>
</tr>
<tr>
<td>$11,000 a month from now</td>
<td>23%</td>
</tr>
<tr>
<td>$100 a month from now</td>
<td>30%</td>
</tr>
<tr>
<td>$110 two months from now</td>
<td>70%</td>
</tr>
<tr>
<td>$1,000 a month from now</td>
<td>28%</td>
</tr>
<tr>
<td>$11,000 two months from now</td>
<td>72%</td>
</tr>
<tr>
<td>$100,000 two months from now</td>
<td>58%</td>
</tr>
</tbody>
</table>
Getting into trouble

The previous sections have outlined a wide range of common consumer behaviours, most of which do not conform to the ‘human calculator’ model typically assumed by orthodox economists. The purpose of this section is to highlight the behaviours and attributes that are most commonly associated with getting into financial difficulty. This section also looks closely at low-income earners but it is important to note that although low-income earners are more likely to experience financial trouble, as shown below, such difficulties can be found across the income and age spectrum.

Who gets into financial difficulty?

Figure 7.1 shows the distribution of low-income earners and those who have experienced financial difficulty in the past 12 months across the behaviour categories described in Section 2. The most striking finding is the disproportionate representation of those who have experienced recent financial hardship in the ‘oblivious’ and ‘overwhelmed’ categories. Similarly, while neither the ‘human calculator’ nor ‘spending hawk’ categories are well-populated by the community at large, there are even fewer who have experienced financial difficulty in these categories.

Perhaps surprisingly, the distribution of low-income earners across the categories is quite similar to that of the entire population. The main exceptions are the significantly lower proportion of low-income earners in the ‘playing catch-up’ and ‘eternal optimists’ categories and a higher proportion of the ‘oblivious’ category.

The kinds of financial difficulties people suffer are outlined in Table 7.1. The most common financial difficulty experienced by all levels of income is the inability to pay household bills on time while the least common problem was the inability to meet mortgage or rent payments on time. While low-income earners are twice as likely to have experienced some form of financial difficulty (39 per cent) than high-income earners (15 per cent), it is perhaps surprising how common financial difficulties are even among the wealthiest third of the population.

Table 7.1 Proportion of respondents who reported being in financial difficulty in the past 12 months.

<table>
<thead>
<tr>
<th></th>
<th>Low-income</th>
<th>Middle-income</th>
<th>High-income</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Couldn’t afford to pay household bills on time</td>
<td>32%</td>
<td>21%</td>
<td>11%</td>
<td>21%</td>
</tr>
<tr>
<td>Couldn’t afford to buy food and groceries</td>
<td>23%</td>
<td>11%</td>
<td>5%</td>
<td>12%</td>
</tr>
<tr>
<td>Couldn’t make minimum credit card payments</td>
<td>11%</td>
<td>10%</td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>Couldn’t afford to pay mortgage or rent on time</td>
<td>12%</td>
<td>8%</td>
<td>3%</td>
<td>8%</td>
</tr>
<tr>
<td>Some kind of financial difficulty</td>
<td>39%</td>
<td>27%</td>
<td>15%</td>
<td>26%</td>
</tr>
</tbody>
</table>

Base = 1,180
Figure 7.2 reveals an interesting pattern in relation to the distribution of those who have experienced financial hardship in terms of age and whether they have a home loan or not. While the overall figure for those with and without a mortgage are identical (26 per cent), younger people experiencing financial hardship are much more likely not to have a mortgage while older people experiencing difficulties are much more likely to have one.

Table 7.2 shows that people who have experienced financial difficulty are much more likely to describe themselves as worse than average when it comes to monitoring their personal/household budget (24 per cent) than people who have not experienced financial difficulties (seven per cent). However, those who have experienced financial hardship were still far more likely to describe themselves as better than average in this regard (38 per cent) than below average.

Table 7.2 also suggests a number of other notable differences between the self-perception of those who have experienced financial hardship and those who have not. People who have suffered financial problems were:

- twice as likely to describe themselves as below average in relation to sticking to their personal/household budget.
- four times more likely to describe themselves as below average in relation to saving for large purchases.
- twice as likely to describe themselves as below average in relation to the ability to resist impulse purchases.

**How do people wind up in financial difficulty?**

Table 7.2 also suggests a number of other notable differences between the self-perception of those who have experienced financial hardship and those who have not. People who have suffered financial problems were:

- twice as likely to describe themselves as below average in relation to sticking to their personal/household budget.
- four times more likely to describe themselves as below average in relation to saving for large purchases.
- twice as likely to describe themselves as below average in relation to the ability to resist impulse purchases.

Figure 7.2 Proportion of respondents with and without a home loan experiencing financial difficulty in the previous 12 months

**Table 7.2 Would you describe yourself as better or worse than average at these aspects of spending and saving?**

<table>
<thead>
<tr>
<th></th>
<th>In financial difficulty</th>
<th>Not in financial difficulty</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Monitoring my personal/household budget</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worse than average</td>
<td>24%</td>
<td>7%</td>
<td>12%</td>
</tr>
<tr>
<td>About average</td>
<td>38%</td>
<td>28%</td>
<td>31%</td>
</tr>
<tr>
<td>Better than average</td>
<td>38%</td>
<td>64%</td>
<td>57%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Sticking to my personal/household budget</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worse than average</td>
<td>30%</td>
<td>14%</td>
<td>18%</td>
</tr>
<tr>
<td>About average</td>
<td>39%</td>
<td>32%</td>
<td>34%</td>
</tr>
<tr>
<td>Better than average</td>
<td>31%</td>
<td>54%</td>
<td>48%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Saving for large purchases</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worse than average</td>
<td>40%</td>
<td>10%</td>
<td>18%</td>
</tr>
<tr>
<td>About average</td>
<td>32%</td>
<td>31%</td>
<td>32%</td>
</tr>
<tr>
<td>Better than average</td>
<td>27%</td>
<td>58%</td>
<td>50%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Resisting impulse purchases</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worse than average</td>
<td>29%</td>
<td>15%</td>
<td>19%</td>
</tr>
<tr>
<td>About average</td>
<td>30%</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>Better than average</td>
<td>40%</td>
<td>54%</td>
<td>50%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Base = 1,180. Table excludes a small number of respondents who answered ‘not sure’ to the question about being above or below average. Columns may not sum to 100 per cent due to rounding error.
Table 7.3 shows differences in the reported behaviour of those who have and have not experienced financial hardship in relation to the way they use their credit cards. While it is difficult to disentangle cause and effect, it is clear that those who are not in financial difficulty are nearly four times more likely to pay off their credit card in full each month. Put another way, the inability to repay credit cards in full is a good indicator of the likelihood of experiencing financial hardship.

What do people do when they experience financial difficulties?
Table 7.4 provides data showing where people who experience financial difficulties turn for help. It shows that regardless of income, the most common approach is for individuals to attempt to deal with the situation by themselves (41 per cent) and that the least common solutions are to seek assistance from financial counsellors (two per cent) or community organisations/charities (one per cent).

The most striking differences between the approaches adopted by high- and low-income earners experiencing financial hardship are the very high reliance by low-income earners on Centrelink (22 per cent) and by high-income earners on banks/financial institutions (28 per cent).

Table 7.3 Credit-card behaviour among respondents in and not in financial difficulty in the previous 12 months

<table>
<thead>
<tr>
<th>Paid credit card off in full</th>
<th>In financial difficulty</th>
<th>Not in financial difficulty</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>16%</td>
<td>60%</td>
<td>49%</td>
</tr>
<tr>
<td>Did not pay credit card off in full</td>
<td>52%</td>
<td>23%</td>
<td>31%</td>
</tr>
<tr>
<td>Does not have a credit card</td>
<td>32%</td>
<td>16%</td>
<td>20%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Base = 1,166. Includes respondents who indicated whether they have a credit card and how much of their most recent credit card bill they paid. Does not include respondents who did not provide information on their credit card behaviour. Columns may not sum to 100 per cent due to rounding error.

Table 7.4 If you did run into financial difficulty, who do you think you would turn to first for help or advice? Please think about sources of help beyond immediate family/partner/friends.

<table>
<thead>
<tr>
<th>Nobody - I would deal with the situation by myself</th>
<th>Low-income</th>
<th>Middle-income</th>
<th>High-income</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>My bank/financial institution</td>
<td>36%</td>
<td>44%</td>
<td>41%</td>
<td>41%</td>
</tr>
<tr>
<td>Financial adviser/accountant</td>
<td>17%</td>
<td>21%</td>
<td>28%</td>
<td>23%</td>
</tr>
<tr>
<td>Centrelink</td>
<td>5%</td>
<td>9%</td>
<td>13%</td>
<td>9%</td>
</tr>
<tr>
<td>Financial counsellor</td>
<td>22%</td>
<td>7%</td>
<td>1%</td>
<td>8%</td>
</tr>
<tr>
<td>Community organisation/charity</td>
<td>1%</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>10%</td>
<td>8%</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Not sure</td>
<td>8%</td>
<td>7%</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Base = 1,180. Columns may not sum to 100 per cent due to rounding error.
Having considered where people turn to for advice, it is interesting to explore how those experiencing financial difficulties attempt to resolve the situation. Figure 7.3 shows the most common responses to financial hardship by gender. It appears that men and women turn to quite similar sources in times of need, with the most common responses being to borrow money from friends/family or to borrow up to the limit of their credit cards. Around a third of people experiencing financial difficulty pawned or sold something to pay for something else, and one in ten (10 per cent) borrowed money from short-term/pay-day lenders.

Figure 7.3 Responses to a difficult financial situation by gender

Conclusions

While low-income earners are more likely to experience financial difficulties than the rest of the population, a significant percentage of the highest-income households report experiencing difficulties paying household bills or even making mortgage and rent payments.

Overconfidence appears to be strongly associated both with getting into financial difficulty and acting as a barrier to getting out. The other most risky behaviour categories are the oblivious, the overwhelmed and those playing catch-up.

Key lessons

Those who experienced financial hardship are:

1) twice as likely to describe themselves as below average in relation to sticking to their personal/household budget

2) four times more likely to describe themselves as below average in relation to saving for large purchases

3) twice as likely to describe themselves as below average in relation to the ability to resist impulse purchases

4) more likely to attempt to solve the problem themselves

5) highly unlikely to seek assistance from financial counsellors or charities

6) likely to borrow money from friends or family or to borrow more heavily on credit cards, which they use as their most common source of funds.
Conclusions

Australian consumers are a physically, culturally, attitudinally and behaviourally diverse group of people. The evidence reported above shows that when it comes to the way they make financial decisions, the approaches they adopt are similarly broad. While this should not come as much of a surprise, the conclusion is, in fact, anathema to the assumptions and deductions of orthodox economics, which works on the basis that all consumers are, or should be, human calculators.

One of the most interesting findings coming from the survey evidence presented in this report is that while consumer behaviour is quite diverse, household income is not one of the main determinants of the behavioural categories into which people fit. While those who have experienced financial hardship in the last 12 months are much less likely to be 'human calculators' or 'spending hawks' than the population as a whole, the same is not true for low-income earners.

Indeed, although low-income earners are more likely to have been unable to pay their bills in the past 12 months than the community as a whole, a substantial percentage of high-income households (15 per cent) also experienced financial difficulties.

There is no doubt that those with more money have more options and better access to short- and long-run finance than low-income earners. However, the majority of low-income earners report being able to meet their financial obligations, while a significant minority of high-income earners do not. It would seem, therefore, that a major determinant of financial hardship is the way that individuals make their financial decisions, rather than their socio-economic situation.

Interestingly, low-income earners are just as likely to be spending hawks as the community as a whole, perhaps out of necessity or perhaps out of mindset. While the distribution of low-income earners across most other behavioural categories is broadly consistent with that of the population as a whole, the only other noticeable differences are that they are less likely to be eternal optimists and more likely to be overwhelmed. Both of these results are more likely to be a result of circumstances than a cause of financial hardship.

One of the major causes of financial stress would seem to be overconfidence. The survey results show again and again that when asked to rate their relative ability in relation to financial decision-making, far more people believe they are above average than below average - both in knowledge ('understanding everyday financial products') and in behaviour ('making good financial decisions'). This perception in borne out strongly when people do experience financial hardship, with the most commonly sought 'solution' to financial difficulties being to try and solve the problem on your own.

Indeed, while 41 per cent of those who had experienced financial hardship in the last 12 months said that they would try to deal with the situation themselves, only two per cent said that they would seek assistance from a financial counsellor.

Financial products are increasingly complex and experiencing financial difficulties can be extremely stressful for individuals and families. The results above suggest that there are a range of simple steps that people can take, both to reduce their chances of experiencing financial difficulties and to more rapidly recover if they are currently facing problems.

The main steps include:
1) try to be realistic rather than optimistic about your financial knowledge and skills
2) develop a budget and try to stick to it
3) spend time shopping around for savings on regular expenses such as mobile phones and electricity, even if this is confusing or tiresome
4) pay off your credit card debt as quickly as you can, and avoid the temptation to ‘stock up’ on items that are on sale
5) don’t compartmentalise your finances in such a way that you simultaneously pay high interest on credit cards while earning (or avoiding) low interest on savings accounts (by being in advance on your mortgage)
6) don’t be influenced by financial institutions about how much you ‘could’ borrow; the fact that they are willing to lend it doesn’t mean that you will feel comfortable repaying it
7) if you get into financial trouble, ask for help sooner rather than later.
Overconfidence appears to be a significant cause of financial hardship and a significant barrier to escaping it. While it can be hard for individuals to admit that they do not always understand how some financial products work, especially to others, until they can do so they will be unable to make fully informed financial choices.

Most Australians are capable of making everyday financial decisions, but the way they are presented with information, the way they view the decision, and whether they feel supported, rushed or anxious when they are making it, will have an enormous impact on the quality of the decision they make.

Whether it is in relation to designing good public policy or developing good tools for talking to individuals experiencing financial hardship, the data presented above makes it clear that it’s meaningless to think of Australian consumers as either being ‘rational’ or ‘irrational’. Unfortunately, the overwhelming body of orthodox economic analysis encourages just such a distinction.

Some people make good decisions all of the time. Some people make good decisions most of the time. And most people make good decisions some of the time. The challenge for policymakers, financial educators and individuals themselves is to better understand the reasons that people make some decisions better than others and to understand the factors that encourage both optimal and less optimal decision-making.

Only when we have admitted that it is difficult to be a human calculator – as only one in five people can claim to be - will it be possible to persuade more people to use the digital calculators lurking in their desk drawers or, failing that, to call someone who enjoys the challenge.
### Appendix A  Detailed definition of behavioural categories

<table>
<thead>
<tr>
<th>Consumer type</th>
<th>Definition</th>
<th>Frequency in the population</th>
</tr>
</thead>
</table>
| Overconfident     | People who say they are better than average at making good financial decisions, AND:  
  a) Don’t pay their credit card off in full each month, OR  
  b) Don’t know what fees AND rates apply to their savings account, OR  
  c) Don’t know what fees AND rates apply to their home loan | 28.4%                      |
| Overwhelmed       | a) People who say they are worse than average at understanding everyday financial products, OR  
  b) People who say they are worse than average at making good financial decisions, OR  
  c) People who don’t have a good value mobile phone plan because it’s too hard to work out. | 17.7%                      |
| Playing catch-up  | People who don’t pay their credit card off in full each month AND always or often pay at least one kind of essential bill on their credit card. | 30.4%                      |
| Oblivious         | a) People who don’t know either the fees or interest rate that apply to their savings account, OR  
  b) People who don’t know either the fees or interest rate that apply to their home loan (if they have one), OR  
  c) People who haven’t investigated whether they could get a better deal on their home loan, OR  
  d) People who are unsure whether their mobile phone plan provides good value. | 41.0%                      |
| Eternal optimists | People who took out a home loan without considering the possibility of losing their job or getting sick.                                                                                                | 8.7% (43.6% of relevant respondents) |
| Compartmentalisers| People who don’t pay their credit card off in full each month, AND:  
  a) have a separate savings account, which is about the same or larger than their credit card bill, OR  
  b) have a redraw on their home loan, which is about the same or larger than their credit card bill, PLUS  
  c) People who have a personal loan AND have a separate savings account, which is about the same or larger than their personal loan. | 13.9%                      |
| Spending hawks    | People who have a budget and stick to it entirely.                                                                                                                                                    | 5.9%                       |
| Human calculators | a) People who pay off their credit cards in full each month (if they have a credit card), AND  
  b) know what fees/rates apply to their savings account/home loan, AND  
  c) are paying one of the lowest rates available on their home loan (if they have a home loan), AND  
  d) have investigated whether they have the right insurance coverage in the past year, AND  
  e) are not compartmentalisers.                                                                                                  | 22.2%                      |
Appendix B  Survey questionnaire

Q1. Are you responsible for paying the bills in your household?
   • Yes, all of them
   • Yes, some of them
   • No

Q2. Would you describe yourself as better or worse than average at the following things? [much better than average, a little better than average, about average, a little worse than average, much worse than average]
   • Q2a. Understanding everyday financial products (eg credit cards, bank accounts)
   • Q2b. Monitoring my personal/household budget
   • Q2c. Sticking to my personal/household budget
   • Q2d. Making good financial decisions
   • Q2e. Investing for retirement
   • Q2f. Saving for large purchases
   • Q2g. Resisting impulse purchases

Q3. Do you...
   • Own your own home in full (no mortgage) - skip to Q5
   • Pay a mortgage on your home
   • Rent - skip to Q5
   • Live with parents/relatives - skip to Q5
   • Other - skip to Q5

Q4. When did you take out your current home loan?
   • Less than a year ago
   • Between 1 and 5 years ago
   • More than 5 years ago
   • Not sure/can’t remember

Q5. Which of the following kinds of insurance policies do you currently hold? Please include any insurance policies held in your partner’s name. (yes/no/not sure)
   • Q5a. Comprehensive car insurance
   • Q5b. Home and contents insurance
   • Q5c. Income protection
   • Q5d. Life insurance
   • Q5e. Mortgage insurance
   • Q5f. Credit card insurance
   • Q5g. Private health insurance

Q6. Do you have a personal loan from a financial institution? (not a home loan)
   • Yes
   • No

Q7. How many credit cards do you have? Please include only credit cards for personal use.
   • None - skip to Q10
   • 1
   • 2
   • 3
   • 4
   • 5 or more
   • Not sure

Q8. Please think about the most recent credit card bill you paid. To the best of your recollection, did you ...
   • Make the minimum repayment
   • Make less than the minimum repayment
   • Make more than the minimum repayment, but less than the full amount on the bill
   • Repay the full amount on the bill
   • Not sure/can’t remember

Q9. Do you have a mobile phone for personal use?
   • Yes - I pay the bills
   • Yes - my work pays the bills - skip to Q12
   • No - skip to Q12

Q10. Which of these best describes your mobile phone plan?
   • Pre-paid/top-up as needed
   • Post-paid/contract
   • Not sure

Q11. Do you know the name of the company that supplies electricity to your home?
   • Yes
   • No

Q12. Which of these best describes how you shop for non-essential items? (eg clothes, DVDs )
   • I buy what I want, regardless of whether it’s on sale
   • I try to buy when things are on sale, but I also buy things that are not on sale
   • I usually buy when things are on sale
   • Not sure/it varies a lot
Q13. Imagine your favourite store had a sale on right now. Assuming you have money to spend, which of these would you be most likely to do?
• Buy as much as you can while things are cheap
• Buy one or two things while they are cheap
• Only buy something if you really wanted or needed it
• Not sure

Q14. If a product in a store is advertised at a low price, which of these do you think is most likely?
• The other products in the store are likely to be cheap as well
• The other products in the store are likely to be expensive
• Not sure
[If respondent has a post-paid mobile phone plan]

Q15. Please think about when you took out your current mobile phone contract/plan. How many different mobile phone providers did you consider before choosing your current plan?
• None – I stuck with the provider I was already with
• 1 other provider
• 2 other providers
• 3 or more other providers
• Not sure/can’t remember
[If respondent has a pre-paid mobile phone plan]

Q16. Please think about when you chose your current mobile phone provider. How many different mobile phone providers did you consider before choosing your current provider?
• None – I stuck with the provider I was already with
• 1 other provider
• 2 other providers
• 3 or more other providers
• Not sure/can’t remember

Q17. Taking into account the way that you use your mobile phone, how certain are you that it gives you the best value for money?
• Definitely the best value for money – skip to Q20
• Probably the best value for money – skip to Q20
• Probably not the best value for money
• Definitely not the best value for money
• Not sure – skip to Q20

Q18. You said that there may be a better value mobile phone plan available. Why haven’t you switched to this plan?
• I can’t be bothered/too much hassle to switch
• It’s too hard to work out which plan/provider is the best
• I’m committed to a contract
• Other reason
• Not sure

[If respondent pays the household bills]

Q19. How often do you use your credit card(s) to pay the following kinds of bills? [always/often/sometimes/rarely/never/not sure/not applicable]
• Q19a. Electricity/gas/water
• Q19b. Doctor/medical centre
• Q19c. Car insurance
• Q19d. Car rego
• Q19e. Council rates
• Q19f. Health insurance
• Q19g. Home phone/internet
• Q19h. Mobile phone
• Q19i. Rent
• Q19j. Mortgage payments
• Q19k. Food and groceries

Q20. If you use an ATM that is not from your own bank, you are usually charged a $2 fee. When you need to get some cash, do you usually...
• Use an ATM from your own bank, even if this involves a lot of effort
• Try to find an ATM from your own bank, but use another ATM if there is none within easy walking distance
• Find the nearest or most convenient ATM, even if it is not from your own bank
• It varies a lot/not sure
• Don’t use ATMs

Q21. Please think about your main savings/transaction account. Do you know...
• Q21a. What the current interest rate is
• Q21b. What other fees and charges apply to this account
[If respondent has a mortgage]

Q22. Please think about your home loan. Do you know...
• Q22a. What the current interest rate is
• Q22b. What other fees and charges apply to your home loan
[If respondent has taken out a home loan in the past 5 years]
Q23. Please think about when you took out your current 
home loan. When you were deciding how much to borrow, 
which of the following did you take into account? [Y es – 
took this into account/No - didn't take this into account/ 
Not sure/can't remember] [Split into 2 grids]
• Q23a. Your everyday expenses
• Q23b. Large purchases you might want to make (eg 
overseas holiday, renovations)
• Q23c. The cost of maintaining the home (eg rates, 
repairs)
• Q23d. The maximum amount the bank said I could 
borrow

Q23. Please think about when you took out your current 
home loan. When you were deciding how much to borrow, 
which of the following did you take into account? [Y es – 
took this into account/No - didn't take this into account/ 
Not sure/can't remember] [Split into 2 grids]
• Q23e. The possibility of losing your job or getting 
sick
• Q23f. The possibility of interest rate rises
• Q23g. The possibility of getting a pay rise
• Q23h. The possibility of taking time off work to look 
after children/loved ones

[If respondent has had a home loan for more than a year]

Q24. In the past year, have you investigated whether you 
could get a better deal on your home loan?
• Yes
• No
• Not sure/can't remember
[If yes]

Q25. Which of these best describes the interest rate you 
are currently paying on your home loan? Please answer 
to the best of your knowledge.
• The lowest rate/cheapest available
• One of the lowest rates/cheapest available
• About average
• Higher/more expensive than average
• Not sure

Q26. In the past year, have you investigated whether you 
have the right insurance coverage in any of these areas? 
[yes/no/not sure]
• Q26a. Car insurance
• Q26b. Home/contents insurance
• Q26c. Income protection/life insurance
• Q26d. Private health insurance

Q27. Do you have a savings account which is separate 
from your everyday transaction account, and which you 
use to save for large purchases?
• Yes
• No - skip to Q32
[If respondent has a credit card and does not have a 
personal loan]

Q28. Please think about how much money is currently in 
your separate savings account. Is this amount....?
• Higher than your most recent credit card bill
• About the same amount as your most recent credit 
card bill
• Lower than your most recent credit card bill
• Not sure
[If respondent has a personal loan]

Q29. Please think about how much money is currently in 
your separate savings account. Is this amount....?
• Higher than the amount still to pay on your 
personal loan
• About the same amount as the amount still to pay 
on your personal loan
• Lower than the amount still to pay on your personal 
loan
• Not sure
[If respondent has a mortgage]

Q30. Some people pay more than their monthly 
mortgage payment in order to ‘redraw’ this money later. 
Do you do this?
• Yes
• No - skip to Q34

Q31. Please think about how much money you would be 
able to ‘redraw’ from your home loan if you had to do so 
today. Is this amount....?
• Higher than the full amount on your most recent 
credit card bill
• About the same as the full amount on your most 
recent credit card bill
• Lower than the full amount on your most recent 
credit card bill
• Not sure

Q32. Have you ever drawn up a budget that includes your 
regular expenses?
• Yes
• No
• Not sure
[If respondent has drawn up a budget]

Q33. How much do you keep to your budget?
• Entirely

Appendix B
Q34. In the past 12 months, have any of the following things happened to you because of a shortage of money? [yes/no/not sure]
• Couldn’t afford to pay household bills on time
• Couldn’t afford to pay mortgage or rent on time
• Couldn’t make minimum credit card payments
• Couldn’t afford to buy food and groceries

[If respondent has been in financial difficulty]

Q34a. Have you done any of the following things in response to your difficult financial situation? [yes/no/not sure] [split into 3 grids]
• Q34a. Maxed out your credit card
• Q34b. Requested a higher credit card limit
• Q34c. Requested a new/another credit card
• Q34d. Overdrawn your savings/cash account

Q34b. Have you done any of the following things in response to your difficult financial situation? [yes/no/not sure] [split into 3 grids]
• Q34e. Pawned or sold something to pay for something else
• Q34f. Borrowed money from friends or family
• Q34g. Borrowed money from a charity/community organisation
• Q34h. Borrowed money from a short-term lender/pay-day lender

Q34c. Have you done any of the following things in response to your difficult financial situation? [yes/no/not sure] [split into 3 grids]
• Q34i. Talked to Centrelink about your financial situation
• Q34j. Talked to a financial counsellor about your financial situation
• Q34k. Talked to a bank/financial institution about your financial situation

[If respondent has not been in financial difficulty]

Q35. If you did run into financial difficulty, who do you think you would turn to first for help or advice? Please think about sources of help beyond immediate family/partner/friends.
• My bank/financial institution
• Centrelink

• Financial adviser/accountant
• Financial counsellor
• Community organisation/charity
• Real estate agent
• Other (please specify)
• Nobody - I would deal with the situation by myself
• Not sure

Experimental questions
The following questions are about some hypothetical scenarios. Please answer them as best you can, even if they sound unlikely.

Experiment 1
Procedure: Split half the sample into three equal groups. Use the remaining half for Experiment 2.

El.a. Suppose you received a credit card bill for $1,000, with a minimum repayment of $25. Unless you pay this bill today, you will be charged 20% interest on the total amount. Taking into account your current financial situation, how much would you pay immediately?

El.b. Suppose you received a credit card bill for $1,000, with a minimum repayment of $50. Unless you pay this bill today, you will be charged 20% interest on the total amount. Taking into account your current financial situation, how much would you pay immediately?

El.c. Suppose you received a credit card bill for $1000, with a minimum repayment of $100. Unless you pay this bill today, you will be charged 20% interest on the total amount. Taking into account your current financial situation, how much would you pay immediately?

Experiment 2
Procedure: Split half the sample into three equal groups. Use the remaining half for Experiment 1.

E2.a. Suppose you were looking to buy a house and had a choice between a smaller house for $400,000 and a larger house for $500,000. If the bank said you could borrow a maximum of $500,000, which house do you think you would choose?
• The smaller house for $400,000
• The larger house for $500,000
• Not sure

E2.b. Suppose you were looking to buy a house and had a choice between a smaller house for $400,000 and a larger house for $500,000. If the bank said you could
borrow a maximum of $750,000, which house do you think you would choose?
• The smaller house for $400,000
• The larger house for $500,000
• Not sure

E2c. Suppose you were looking to buy a house and had a choice between a smaller house for $400,000 and a larger house for $500,000. If the bank said you could borrow a maximum of $1 million, which house do you think you would choose?
• The smaller house for $400,000
• The larger house for $500,000
• Not sure

Experiment 3
Procedure: Split half the sample into two equal groups. Use the remaining half for Experiment 4.

E3a. When share prices fall, it is common practice for people to sell their shares to avoid losing more money. If you owned some shares and prices began to fall, would you...?
• Sell some or all of your shares
• Keep your shares
• Not sure

E3b. Share prices go up and down a lot, but good investors hold onto their shares even if prices are falling. If you owned some shares and prices began to fall, would you...?
• Sell some or all of your shares
• Keep your shares
• Not sure

Experiment 4
Procedure: Split half the sample into two equal groups. Use the remaining half for Experiment 3.

E4a. Suppose you loaned $1000 to a friend a year ago. If the inflation rate was 5% and the interest rate paid by banks was 10%, how much would you expect your friend to repay you now? [enter number in dollars]

E4b. Say you loaned $1000 to a friend a year ago. How much would you expect your friend to repay you now? [enter number in dollars]

Experiment 5
Procedure: Split sample into three equal groups.

E5a. Suppose you had bought some shares for $5 before the global financial crisis. If the value of your shares fell to $4, would you be most likely to:
• Sell them to ensure you don’t lose any more money
• Hold on to them until they were worth $5 again
• Compare the relative growth prospects of your shares to other investments
• Buy more shares
• Not sure

E5b. Suppose you owned investment property worth $250 000. If you were advised that the property had fallen in value by 20%, would you be most likely to:
• Sell the property to ensure you don’t lose any more money
• Hold onto the property until it was worth $250,000 again
• Compare the relative growth prospects of the property to other investments
• Buy more investment property
• Not sure

E5c. Suppose you have $25,000 in your superannuation account. If your annual statement showed that your balance had fallen to $20,000, would you be most likely to:
• Change funds to ensure you don’t lose any more money
• Keep your money in the same fund until it is worth $25,000 again
• Compare the relative growth prospects of your fund to other funds
• Put more money into your superannuation account
• Not sure

Experiment 6
Procedure: split sample into four equal groups.

E6a. Suppose that someone was going to give you some money. Which of the following would you prefer to receive?
• $10,000 today
• $11,000 a month from now
• Not sure

E6b. Suppose that someone was going to give you some money. Which of the following would you prefer to receive?
• $10,000 a month from now
• $11,000 two months from now
• Not sure

E6c. Suppose that someone was going to give you
some money. Which of the following would you prefer to receive?
• $100 today
• $110 in a month from now
• Not sure

E6d. Suppose that someone was going to give you some money. Which of the following would you prefer to receive?
• $100 a month from now
• $110 two months from now
• Not sure

Experiment 7
Procedure: split sample into six equal groups.

Q7a. Suppose you discovered that you could save $5 a week in bank fees if you switched to another bank. Taking into account the effort involved, do you think you would do it?
• Definitely would switch banks
• Probably would switch banks
• Probably would not switch banks
• Definitely would not switch banks
• Not sure

Q7b. Suppose you discovered that you could save $5 a week in groceries if you used a supermarket that was further away. Taking into account the effort involved, do you think you would do it?
• Definitely would use the cheaper supermarket
• Probably would use the cheaper supermarket
• Probably would not use the cheaper supermarket
• Definitely would not use the cheaper supermarket
• Not sure

Q7c. Suppose you discovered that you could save $5 a week in petrol if you used a petrol station that was further away. Taking into account the effort involved, do you think you would do it?
• Definitely would use the cheaper petrol station
• Probably would use the cheaper petrol station
• Probably would not use the cheaper petrol station
• Definitely would not use the cheaper petrol station
• Not sure

Q7d. Suppose you discovered that you could save $5 a week in fees and charges if you switched superannuation funds. Taking into account the effort involved, do you think you would do it?
• Definitely would switch super funds
• Probably would switch super funds
• Probably would not switch super funds
• Definitely would not switch super funds
• Not sure

Q7e. Suppose you discovered that you could save $5 a week in fees and charges if you changed your mobile phone provider. Taking into account the effort involved, do you think you would do it?
• Definitely would switch mobile phone provider
• Probably would switch mobile phone provider
• Probably would not switch mobile phone provider
• Definitely would not switch mobile phone provider
• Not sure

Experiment 8
Procedure: split sample into six equal groups.

Q8a. Suppose the final notice for your electricity bill was due today, but you were short of money before your next payday and you had no credit left on your credit card. Do you think you would…?
• Pay the bill today and go without some essentials until the next payday
• Wait until the next payday to pay the bill
• Not sure

Q8b. Suppose you had a doctor’s appointment today, but you were short of money before your next payday and you had no credit left on your credit card. Do you think you would…?
• Keep your doctor’s appointment and go without some essentials until the next payday
• Wait until after the next payday to see the doctor
• Not sure

Q8c. Suppose your car rego was due today, but you were short of money before your next payday and you had no credit left on your credit card. Do you think you would…?
• Pay the car rego today and go without some essentials until the next payday
• Wait until the next payday to pay the bill
• Not sure

Q8d. Suppose your credit card bill was due today, but you
were short of money before your next payday. Do you think you would…?
• Pay the credit card bill today and go without some essentials until the next payday
• Wait until the next payday to pay the bill
• Not sure

Q8e. Suppose the final notice for your mobile phone bill was due today, but you were short of money before your next payday and you had no credit left on your credit card. Do you think you would…?
• Pay the mobile phone bill today and go without some essentials until the next payday
• Wait until the next payday to pay the bill
• Not sure

Q8f. Suppose your rent/mortgage payment was due today, but you were short of money before your next payday and you had no credit left on your credit card. Do you think you would…?
• Make the rent/mortgage payment today and go without some essentials until the next payday
• Wait until the next payday to pay the bill
• Not sure

Demographic questions
S1. Are you…?
• Male
• Female

S2. How old are you?
• Younger than 18 years - terminate
• 18-24 years
• 25-34 years
• 35-44 years
• 45-54 years
• 55-64 years
• 65 years or older

S3. Where do you live?
• New South Wales
• Queensland
• Victoria
• South Australia
• Tasmania
• Western Australia
• Northern Territory
• Australian Capital Territory
• Other - terminate

S4. Which of these categories best describes your annual household income before tax?
• Less than $40,000
• Between $40,000 and $80,000
• More than $80,000

D1. Are you currently in paid work?
• Yes - full time
• Yes - part time
• Yes - casual
• No

D2. Are you retired?
• Yes, fully
• Yes, partly
• No

D3. What is the highest level of education you have completed?
• University qualification
• Trade/technical qualification
• Other university/college/TAFE
• Higher School Certificate/Year 12
• School Certificate/Year 10
• Some high school/primary school
• None of these

D4. Are there any children under the age of 18 in your household?
• Yes - 1 child
• Yes - 2 children
• Yes - 3 or more children
• No

D5. How many people live in your household on a regular basis?
• 1 - skip to Q1
• 2
• 3
• 4
• 5
• 6 or more

D6. Which of these categories best describes your annual household income before tax? Please make your best estimate.
• Less than $10,000
• $10,001 - $20,000
• $20,001 - $30,000
• $30,001 - $40,000
• $40,001 - $50,000
• $50,001 - $60,000
• $60,001 - $70,000
• $70,001 - $80,000
• $80,001 - $90,000
• $90,001 - $100,000
• $100,001 - $120,000
• $120,001 - $150,000
• More than $150,000
• Not sure/rather not say

D7. In which country were you born?
• Australia
• New Zealand
• UK/Ireland
• Greece
• Italy
• Vietnam
• China
• India
• Philippines
• Tonga
• Cook Islands
• Samoa
• Other (please specify)